Review Form 1.6

Journal Name:	**International Journal of Plant & Soil Science**
Manuscript Number:	**Ms_IJPSS_94000**
Title of the Manuscript:	**Heterosis Studies For Grain Yield And Yield Components In Rabi Sorghum [Sorghum Bicolor (L.) Moench.]**
Type of the Article	

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty'**, provided the manuscript is scientifically robust and technically sound.
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PART 1: Review Comments

	Reviewer's comment	**Author's comment** *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Compulsory REVISION comments	-In order to identify the high yielding *Rabi* sorghum hybrids, promising hybrids were sorted out based on positive significant standard heterosis for grain yield per plant. -Total twenty one hybrids exhibited significant standard heterosis for grain yield per plant. The best cross combination was 104A x RSR 1012 (86.59 %) recorded maximum standard heterosis followed by the cross 104A X RSR 1019 (73.17 %) and 104 A X RSR 1003 (70.73%) for grain yield per plant. -Heterosis has been considered as well proven method for increasing yield and for improvement of trait in crops, thereof the exploitation of heterosis for the hybrid development programme considered as one of the greatest breakthrough in plant breeding.	
Minor REVISION comments	-Sorghum is fifth most important cereal crop in the world after rice, wheat, maize and barley [1], cultivated globally for food, fodder, feed and fuel [2]. "Heterosis" or "hybrid vigour" is the increased or decreased vigour growth, fitness or yield of a hybrid over the parental values, resulting from the crossing of genetically unlike parents -Commercial exploitation of heterosis in sorghum today is profitable proposition. It is obviously important that the crosses are compared with released hybrids rather than merely comparing with their mid or better parent. Therefore, present investigation the performance of the experimental crosses were compared with that of the most popular released hybrid, CSH 15 R in order to estimate the magnitude of standard heterosis, -The crosses with high heterotic potential could be isolated for further evaluation and commercial cultivation. In this study, an effort was made to identify the high grain yielding cross combinations produced by crossing newly developed parental lines of r*abi* sorghum. The promising hybrids were sorted out based on positive significant standard heterosis for grain yield.	
Optional/General comments	-The present investigation was conducted to assess the magnitude of heterosis of rabi sorghum (*Sorghum bicolor* (L.) Moench) developed by crossing four lines and twelve testers (in line × tester design) to produce 48 F_1 cross combinations at Sorghum Improvement Project, MPKV., Rahuri, Maharashtra -Four male sterile lines (185A, RMS2010-10A, RMS2010-24A, 104 A) were crossed with twelve testers (RSR 950, RSR 1012, RSR 1013, RSR 984, RSR 1014, RSR 1019, RSR 986, RSR 987, RSR 1020, RSR 1027, RSR 1003, RSR 955) in line x testers mating design used to develop 48 F_1's hybrids. -The resulting 48 F_1's along with their 16 parents and one check (CSH-15 R) were evaluated for grain yield and yield contributing traits in rabi sorghum 2017-18. Please admenment the **CONCLUSION**	

PART 2:

	Reviewer's comment	**Author's comment** *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Are there ethical issues in this manuscript?	*(If yes, Kindly please write down the ethical issues here in details)*	

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